FIG. 1

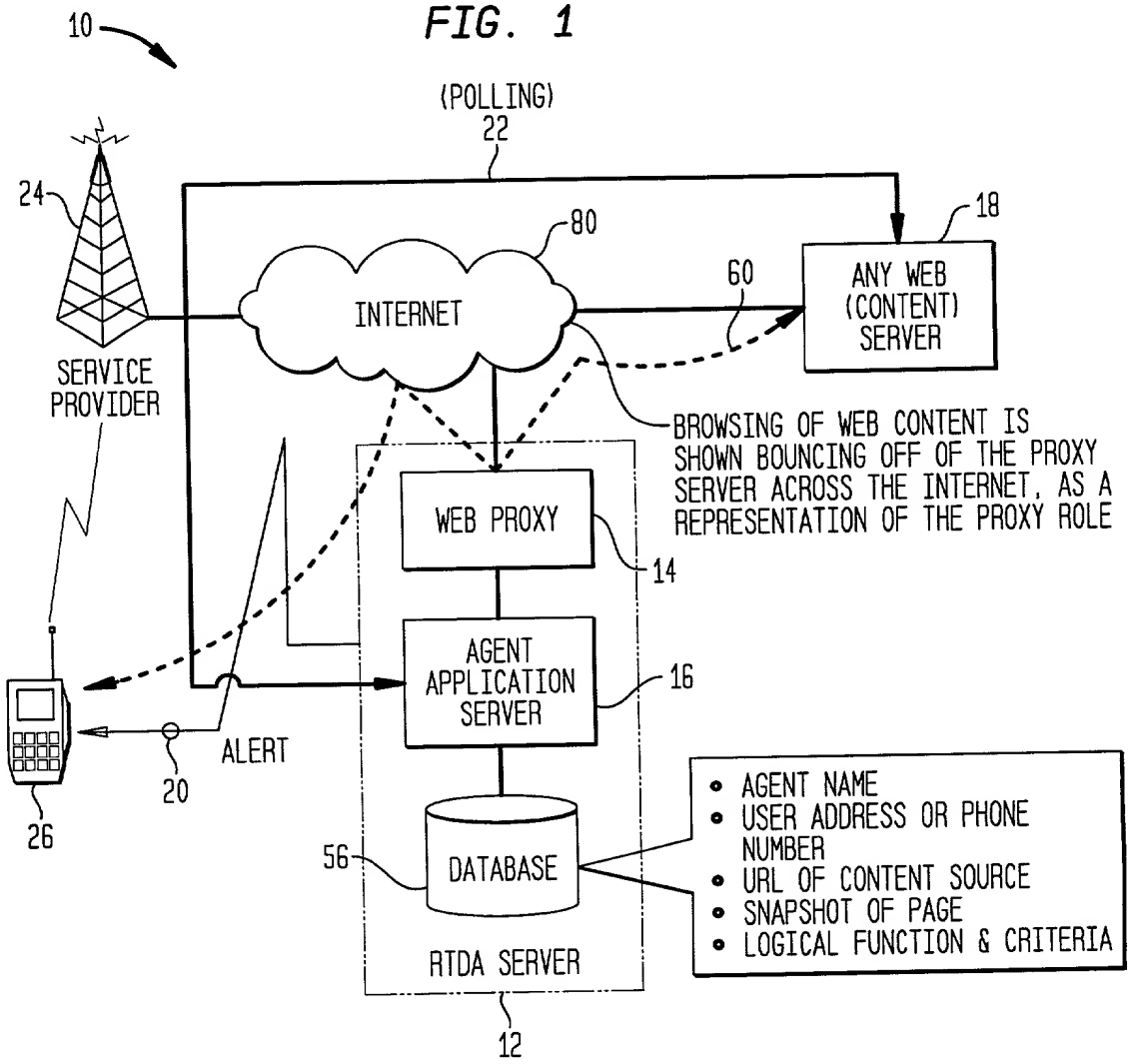

10
(POLLING)
22
24
80
18
60
INTERNET
ANY WEB
(CONTENT)
SERVER
SERVICE
PROVIDER
BROWSING OF WEB CONTENT IS SHOWN BOUNCING OFF OF THE PROXY SERVER ACROSS THE INTERNET, AS A REPRESENTATION OF THE PROXY ROLE
WEB PROXY
14
AGENT
APPLICATION
SERVER
16
ALERT
20
26
56
DATABASE
AGENT NAME
USER ADDRESS OR PHONE NUMBER
URL OF CONTENT SOURCE
SNAPSHOT OF PAGE
LOGICAL FUNCTION & CRITERIA
RTDA SERVER
12

FIG. 2

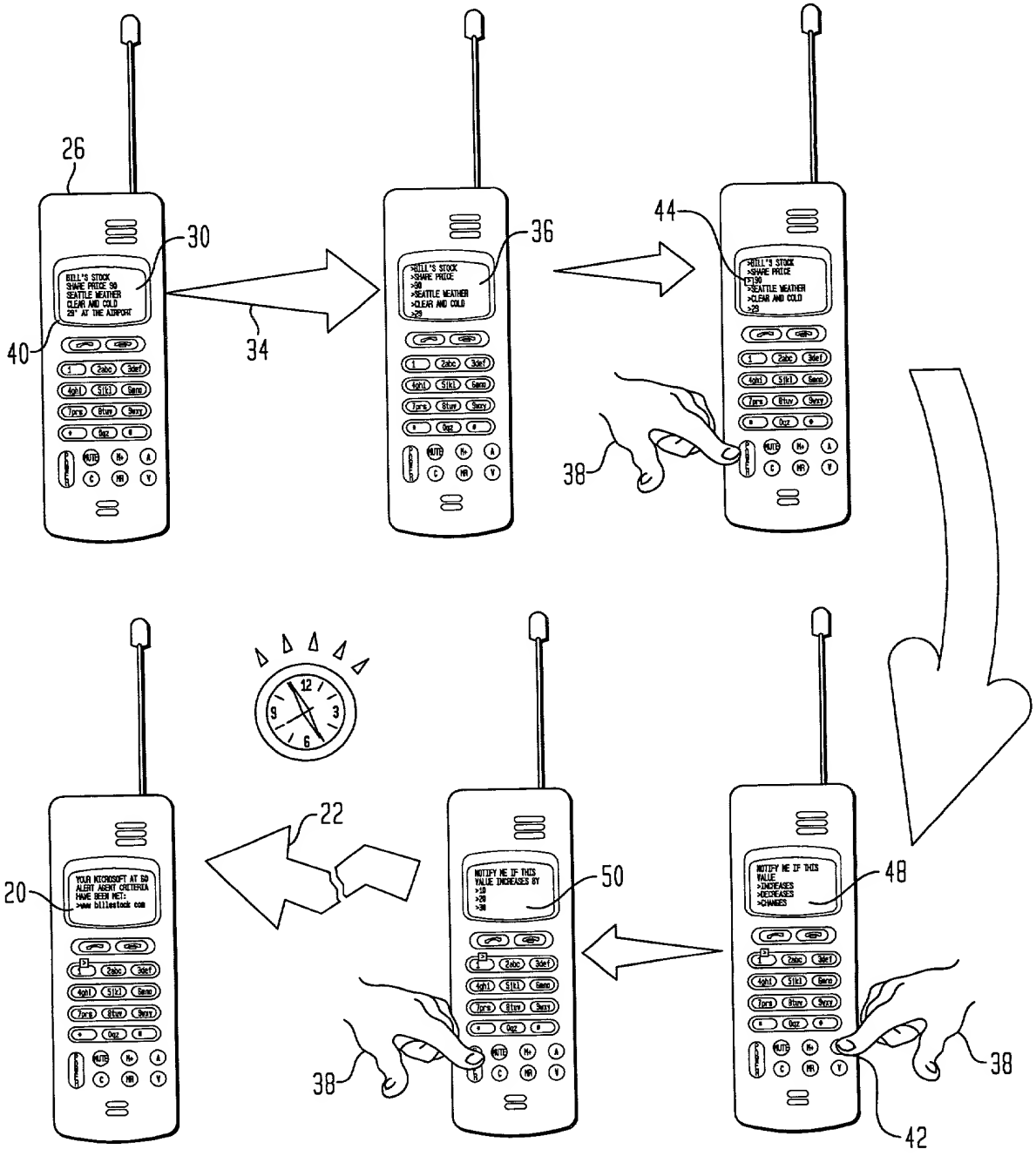


FIG. 3

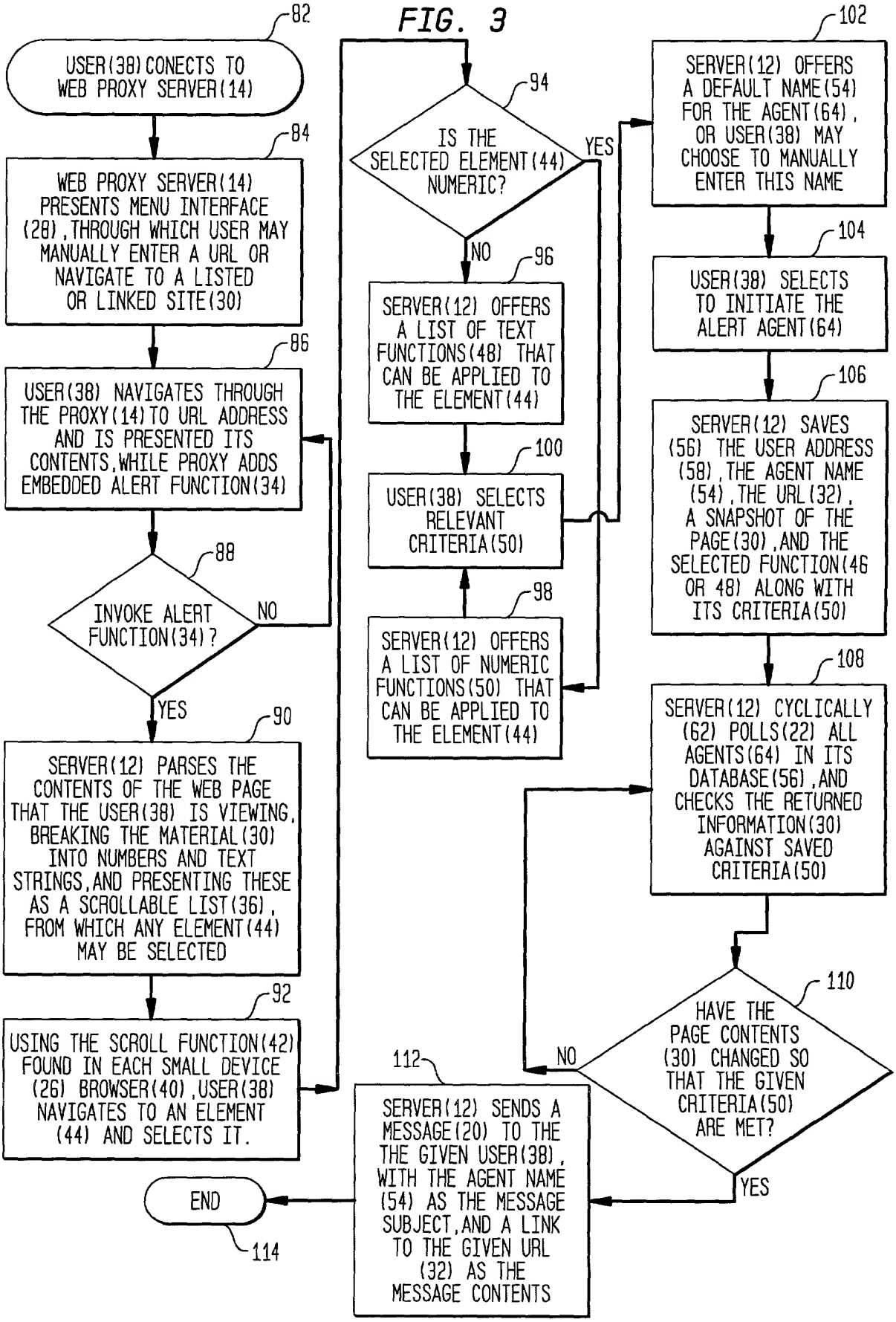

82
USER(38) CONECTS TO WEB PROXY SERVER(14)
84
WEB PROXY SERVER(14) PRESENTS MENU INTERFACE (28), THROUGH WHICH USER MAY MANUALLY ENTER A URL OR NAVIGATE TO A LISTED OR LINKED SITE(30)
86
USER(38) NAVIGATES THROUGH THE PROXY(14) TO URL ADDRESS AND IS PRESENTED ITS CONTENTS, WHILE PROXY ADDS EMBEDDED ALERT FUNCTION(34)
88
INVOKE ALERT FUNCTION(34)?
NO
YES
90
SERVER(12) PARSES THE CONTENTS OF THE WEB PAGE THAT THE USER(38) IS VIEWING, BREAKING THE MATERIAL(30) INTO NUMBERS AND TEXT STRINGS, AND PRESENTING THESE AS A SCROLLABLE LIST(36), FROM WHICH ANY ELEMENT(44) MAY BE SELECTED
92
USING THE SCROLL FUNCTION(42) FOUND IN EACH SMALL DEVICE (26) BROWSER(40), USER(38) NAVIGATES TO AN ELEMENT (44) AND SELECTS IT.
94
IS THE SELECTED ELEMENT(44) NUMERIC?
YES
NO
96
SERVER(12) OFFERS A LIST OF TEXT FUNCTIONS(48) THAT CAN BE APPLIED TO THE ELEMENT(44)
100
USER(38) SELECTS RELEVANT CRITERIA(50)
98
SERVER(12) OFFERS A LIST OF NUMERIC FUNCTIONS(50) THAT CAN BE APPLIED TO THE ELEMENT(44)
102
SERVER(12) OFFERS A DEFAULT NAME(54) FOR THE AGENT(64), OR USER(38) MAY CHOOSE TO MANUALLY ENTER THIS NAME
104
USER(38) SELECTS TO INITIATE THE ALERT AGENT(64)
106
SERVER(12) SAVES (56) THE USER ADDRESS (58), THE AGENT NAME (54), THE URL(32), A SNAPSHOT OF THE PAGE(30), AND THE SELECTED FUNCTION(46 OR 48) ALONG WITH ITS CRITERIA(50)
108
SERVER(12) CYCLICALLY (62) POLLS(22) ALL AGENTS(64) IN ITS DATABASE(56), AND CHECKS THE RETURNED INFORMATION(30) AGAINST SAVED CRITERIA(50)
110
HAVE THE PAGE CONTENTS (30) CHANGED SO THAT THE GIVEN CRITERIA(50) ARE MET?
NO
YES
112
SERVER(12) SENDS A MESSAGE(20) TO THE THE GIVEN USER(38), WITH THE AGENT NAME (54) AS THE MESSAGE SUBJECT, AND A LINK TO THE GIVEN URL (32) AS THE MESSAGE CONTENTS
END
114

FIG. 4

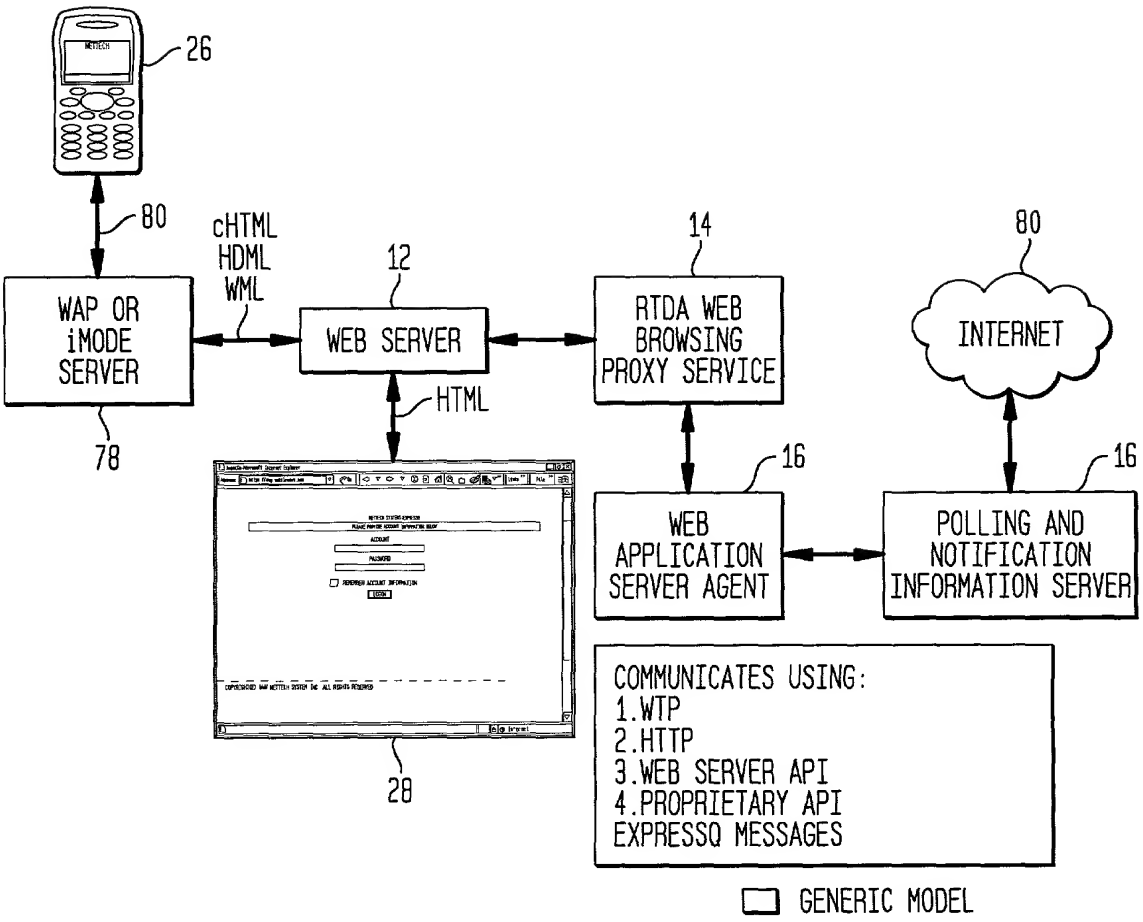
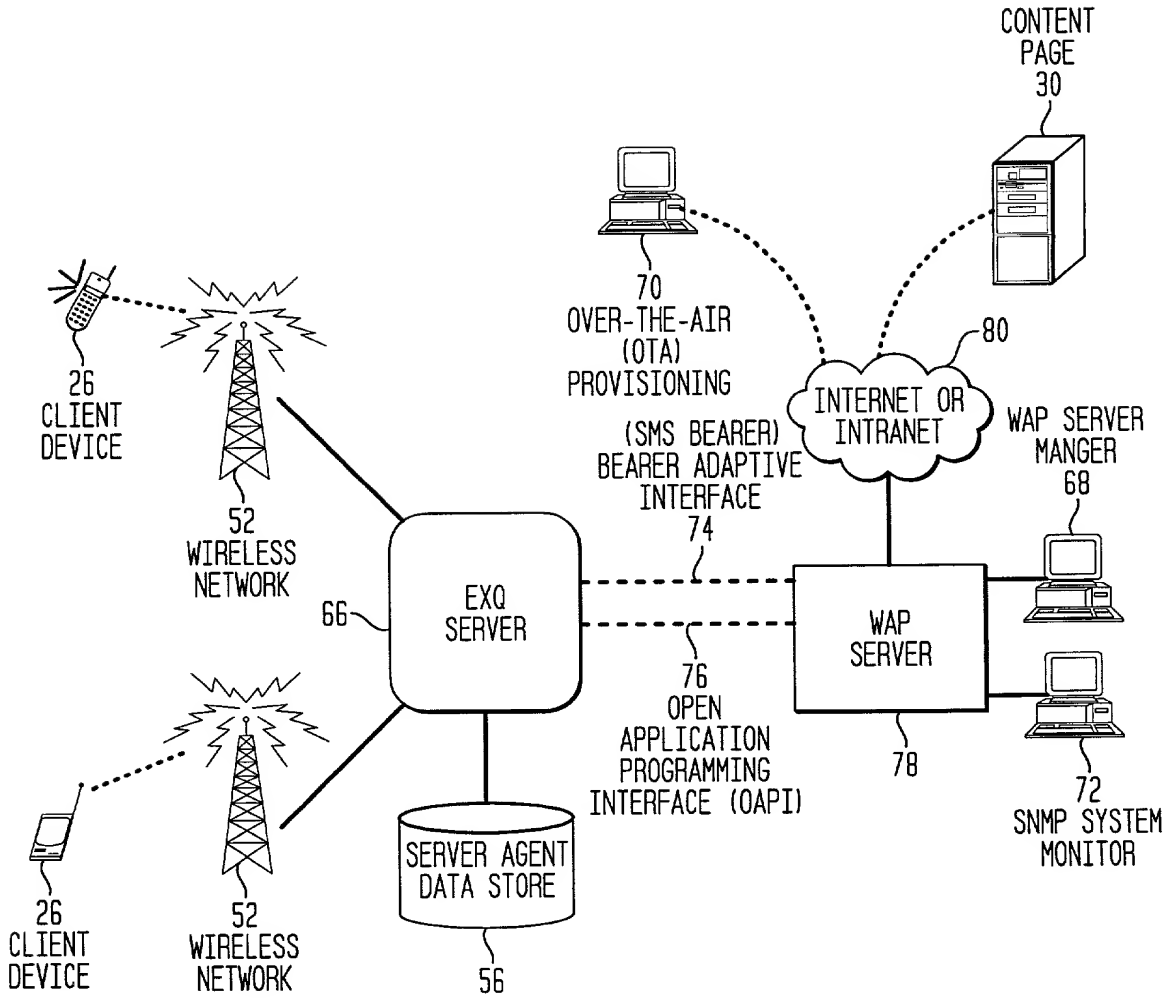

26
80
cHTML
HDML
WML
12
14
80
WAP OR
iMODE
SERVER
WEB SERVER
RTDA WEB
BROWSING
PROXY SERVICE
INTERNET
78
HTML
16
16
WEB
APPLICATION
SERVER AGENT
POLLING AND
NOTIFICATION
INFORMATION SERVER
28
COMMUNICATES USING:
1.WTP
2.HTTP
3.WEB SERVER API
4.PROPRIETARY API
EXPRESSQ MESSAGES
GENERIC MODEL

FIG. 5


CONTENT PAGE 30
70 OVER-THE-AIR (OTA) PROVISIONING
80
INTERNET OR INTRANET
WAP SERVER MANGER 68
(SMS BEARER) BEARER ADAPTIVE INTERFACE 74
26 CLIENT DEVICE
52 WIRELESS NETWORK
66
EXQ SERVER
WAP SERVER
76 OPEN APPLICATION PROGRAMMING INTERFACE (OAPI)
78
72 SNMP SYSTEM MONITOR
SERVER AGENT DATA STORE
56
26 CLIENT DEVICE
52 WIRELESS NETWORK